

What is claimed is:

1. Device for stabilizing a vehicle having an engine and an automatic transmission for driving drive wheels of a first axle, the transmission having a free-wheeling position for interrupting the force flux between the drive wheels and the engine, and having rotation-sensing wheel sensors on the drive wheels and on wheels of a second axle of the vehicle, including a gear shift for shifting the transmission into the free-wheeling position when it is determined, using at least one of the rotation-sensing wheel sensors, that at least one wheel of the second axle is locked or is expected to lock.
2. Device according to Claim 1, wherein the drive wheels are not locked before the transmission shifts into the free-wheeling position owing to the drive effect of the engine.
3. Device according to Claim 1, including a controller for actuating an engine controller of the engine, wherein the controller commands a reduction in an engine power output at least one of before and during the shifting of the transmission into the free-wheeling position.
4. Device according to Claim 1, including a speed determiner for determining a speed of the vehicle, wherein the gear shift shifts the transmission into the free-wheeling position below a predetermined speed of the vehicle.
5. Device according to Claim 4, wherein at the predetermined speed, an antilock brake system of the vehicle is inactive.

6. Device according to Claim 1, wherein the gear shift shifts the transmission into the free-wheeling position as a function of a control signal of the antilock brake system of the vehicle.
7. Device according to Claim 6, wherein the control signal signals the deactivation of the antilock brake system below a predetermined speed of the vehicle.
8. Device according to Claim 1, including a braking deceleration sensor which senses a braking deceleration of the vehicle, and the gear shift shifts the transmission into the free-wheeling position as a function of the sensed braking deceleration.
9. Device according to Claim 1, wherein the gear shift shifts the transmission into the free-wheeling position as a function of a reduction in rotational speed of at least one wheel of the second axle when the at least one wheel of the second axle locks.
10. Device according to Claim 9, the gear shift shifts the transmission into the free-wheeling position when the at least one wheel of the second axle is locked and at the same time the drive wheels of the first axle are not locked.
11. Device according to Claim 1, wherein the gear shift shifts the transmission into the free-wheeling position when there is a difference in rotational speed between at least one drive wheel of the first axle and at least one wheel of the second axle.

12. Device according to Claim 1, wherein the second axle is not driven by the engine.
13. Device according to Claim 1, wherein the first axle is the rear axle and the second axle is the front axle of the vehicle.
14. Device according to Claim 1, wherein, above a predetermined speed, the gear shift shifts the transmission into a drive position.
15. Device according to Claim 1, wherein the gear shift shifts the transmission out of the free-wheeling position and into a drive position of the transmission after one of a predetermined time period and when the at least one wheel of the second axle no longer locks or is no longer expected to lock.
16. Device according to Claim 14, wherein the gear shift shifts the transmission into the drive position which the transmission had been in before being shifted into the free-wheeling position.
17. Device according to Claim 15, wherein the gear shift shifts the transmission into the drive position which the transmission had been in before being shifted into the free-wheeling position.
18. Device according to Claim 3, wherein the controller comprises program code executed by at least one of an antilock brake system, a transmission controller and a driving stability controller.
19. Method for stabilizing a vehicle having an engine and an automatic transmission for driving drive wheels of a first axle, the transmission having a

free-wheeling position for interrupting the force flux between the drive wheels and the engine, and having rotation-sensing wheel sensors on the drive wheels and on wheels of a second axle of the vehicle, wherein the transmission is shifted into the free-wheeling position when it is determined, using at least one of the rotation-sensing wheel sensors, that at least one wheel of the second axle is locked or is expected to lock.